



# **LASER LAB SOURCE**

# marketplace for Scientists & Engineers SmartPower L4800-45C8LN

# **FEATURES**

- 19" standard rack mount
- Easy to use 7" touch panel
- Key switch and interlock
- Safety circuit according to EN ISO 13849-1 and SIL CL 3 according to IEC 62061
- Low noise
- Up to 4.8kW of total power output
- 45 Amps per channel
- Configurable voltage and current versions
- Optional RS-232 and Ethernet interfaces
- Water cooling system
- Customized solutions possible



# **PARAMETERS**

		8 Channel laser diode driver
Current output per channel		0 45 Amps
Voltage output per channel		4,5 15V
Available power output per channel		600 Watts
Accuracy		<0,5%
Stability		<0,1%
Current ripple		< 0,05% @ full load (BW=20Hz)
Trigger rise / fall time		< 5ms
Protection circuits		Overcurrent / overvoltage / overtemperature
		Common data
Voltage input		208 400Vac Y
Maximum power consumption		5,6 kW
Power output		4,8 kW
Cooling system		Water
Dimensions [mm]		602x483x132 (Length x Width x Height)
Weight		35kg
Location of use		Only for inside use
Protection class		II
Degree of protection		IP 20
Radio interference suppression		DIN EN 55011 class A
Noise immunity		EN 61000-6-2 (industrial environment)
Environmental conditi	ons:	
Temperature range		
	Operation	10 40 °C (non-condensing)
	Storage	-10 60 °C
Relative humidity		
	Operation	≤ 80 % (non-condensing)
	Storage	≤ 99 % (non-condensing)
Vertical height of use		
	Operation	3000 m
	Storage	12000 m



# marketplace for Scientists & Engineers SmartPower L4800-45C8LN

### **Connectors**

Water cooling

Connector: KSG 18 NW7 BA

Minimum flow rate: 2I/min
Maximum flow rate: 10I/min

Coolant: Regular clean tap water

**Power input** 

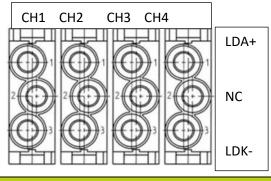
Connector: WIELAND RST 2015G
Voltage: 208 - 400Vac Y
Power draw: max. 20A

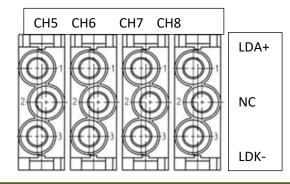
**Output** 

Connector: LAPP EPIC® H-B 16 AG

Voltage per channel: 1 ... 15V Current per channel: 0 ... 45 Amps

#### The channels are laid out as follows:





# **Emission light**

Connector: LUM KFV 50

 PIN 1:
 Red (24Vdc max 100mA)

 PIN 2:
 Green (24Vdc max 100mA)

 PIN 3:
 Yellow (24Vdc max 100mA)

PIN 4: GND

### **User interface:**

Connector: D-SUB D-9

PIN 1: Contactor status (dry contact)

PIN 2: n.c. PIN 3: n.c.

PIN 4: Contactor status (dry contact)
PIN 5: LASER ON GND (galvanic isolated)

PIN 6: n.c

PIN 7: Remote shut down (connect to 8 with dry contact)
PIN 8: Remote shut down (connect to 7 with dry contact)
PIN 9: LASER ON Output TTL 5V (galvanic isolated)

Optional RS-232

Connector: D-SUB D-9

**Optional Ethernet** 

Connector: Standard RJ-45



# LASER LAB SOURCE

# marketplace for Scientists & Engineers SmartPower L4800-45C8LN

# **FRONT SIDE**



- 1 Control display
- 2 Keylock
- 3 System power-ON indication LED
- 4 Power switch

# **REAR SIDE**



- 1 Optional water cooling
- 2 Circuit breakers
- **3** Service interface
- 4 User interface
- 5 Protective earth

- 6 Power supply
- 7 Optional RS-232
- 8 Optional Ethernet
- **9** Emission light (EMI)
- 10 Power output